

REMARKS

This amendment is submitted in response to the Office Action mailed April 4, 2003. Claims 1-17 remain pending in the application, and claims 5 and 14-17 were allowed. Claims 1-4, 6-9, 11 and 12 were rejected. Claims 10 and 13 were objected to for depending from rejected base claims, but were indicated to be allowable if rewritten in independent form, which has been done herein. Claims 1 and 11 have been amended herein, and new claim 18 has been added. Claims 1-18 are submitted to be in complete condition for allowance. The following remarks are respectfully submitted.

Claims Rejected Under 35 U.S.C. § 102

Claims 1, 2, 11 and 12 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,207,300 to Engel et al. Claims 1 and 11 are the only independent claims of this rejected group. Claims 1 and 11 have been amended to recite that the air pressure actuated control valve assembly is responsive to "an air pressure input for adjustment to and between an open position, a closed position, and at least one position intermediate the open and closed positions." Support for this amendment can be found, for example, in the application at page 15, lines 8-15. Applicants submit that amended claims 1 and 11 are in condition for allowance, because Engel et al. does not teach a control valve adjustable to and between an open position, a closed position, and at least

one position intermediate the open and closed positions. Rather, control body 8 of Engel et al. is only moveable to open and closed positions (see Engel et al. at col. 4, lines 13-40). Accordingly, Applicants respectfully request that the rejection of claim 1 over Engel et al. be withdrawn.

Claim 2 depends from independent claim 1, and claim 12 depends from claim 11. Therefore, claims 2 and 12 are in condition for allowance for at least the reasons stated above for claims 1 and 11. Accordingly, Applicants respectfully request that the rejections of claim 2 and 12 over Engel et al. be withdrawn.

Claims Rejected Under 35 U.S.C. § 103

Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Engel et al. in view of U.S. Patent No. 5,038,897 to Wells et al. Applicants respectfully traverse the rejection of claim 3 because the combination of Engel et al. with Wells et al. does not teach all elements of claim 3. The Examiner admits that Engel et al. does not teach a resistance weld interface between the rod and the piston. The Examiner looks to Wells et al. to overcome this deficiency. However, Applicants note that Wells et al. does not teach or suggest that the resistance welded interface provides a fluid tight seal as set forth in claim 3. Specifically, Wells et al. is directed to a hydraulic damper assembly having a solid piston rod (32). Because there is no air passage provided through the solid rod, it

is not necessary for the weld to provide a fluid-tight seal. Thus, the welded interface may simply comprise a tack weld at one or more locations between the rod and piston. In this regard, modification of Engel et al. to include a resistance welded interface that provides a fluid tight seal can only be the result of improper hindsight analysis using Applicants' disclosure. For at least these reasons, Applicants respectfully request that the rejection of claim 3 over Engel et al. in view of Wells et al. be withdrawn.

Claim 4 depends from independent claim 3 and therefore is in condition for allowance for at least the reasons stated above for claim 3. Accordingly, Applicants respectfully request that the rejection of claim 4 be withdrawn.

Claims 6-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Engel et al. in view of U.S. Patent No. 5,725,239 to de Molina. Claim 6 is the only independent claim of this rejected group. Applicants respectfully traverse the rejection of claim 6 because the combination of Engel et al. with de Molina does not teach all elements of claim 6. The Examiner admits that Engel et al. does not teach controlling the valve in response to a function of weight and a condition of the road. The Examiner alleges that it would have been obvious to modify the device of Engel et al. according to de Molina to overcome this deficiency. However, de Molina fails to teach a modification of Engel et al. that meets the claim language. Specifically, de Molina is directed to a variable

suspension system which includes a shock absorber having a slidably moveable piston (94) separating a cavity (92) of the shock absorber into compression and extension chambers (96, 98). A variable valve assembly (110) is coupled to a fluid reservoir (102) disposed outside of the cavity (92). It is the external valve assembly (110) which is pneumatically controlled and not the piston (94) which separates the compression and extension chambers (96, 98). Accordingly, de Molina does not teach "controlling an air pressure actuated control valve assembly . . . to control the movement of fluid in the passage between the extension and compression chambers" as set forth in claim 6 (emphasis added). Furthermore, Applicants note that Engel et al. is directed to a monotube hydraulic shock whereas de Molina et al. is directed to a twin tube hydraulic shock. The differences in structure and operation of these two different types of shocks present difficulties in incorporating features of the de Molina shock into the shock of Engel et al. For at least these reasons, Applicants respectfully request that the rejection of claim 6 over Engel et al. in view of de Molina be withdrawn.

Claims 7-9 each depend from independent claim 6 and therefore are in condition for allowance for at least the reasons stated above for claim 6. Accordingly, Applicants respectfully request that the rejection of claims 7-9 be withdrawn.

New Claim

New claim 18 was added by this amendment. Claim 18 is similar to claim 1, as originally filed, but further recites that the tapered interface comprises "a frustoconical section formed on an outer surface of the rod and having an axis of revolution extending along a direction parallel to a longitudinal axis of the rod." Support for this amendment can be found in the application, for example, with reference to FIGS. 4 and 5. Accordingly, Applicants submit that no new matter has been added by this amendment. Applicants further submit that claim 18 is in condition for allowance because the cited references do not teach the claimed invention. Specifically, the threads on the piston rod (2) of Engel et al. are not provided on an outer surface of the rod, and due to the inherent pitch angle of the threads, do not comprise a frustoconical section having an axis of revolution extending along a direction parallel to a longitudinal axis of the rod.

In view of the foregoing amendments to the claims and remarks given herein, Applicants respectfully believe this case is in condition for allowance and respectfully request allowance of the pending claims. If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Respectfully submitted,

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